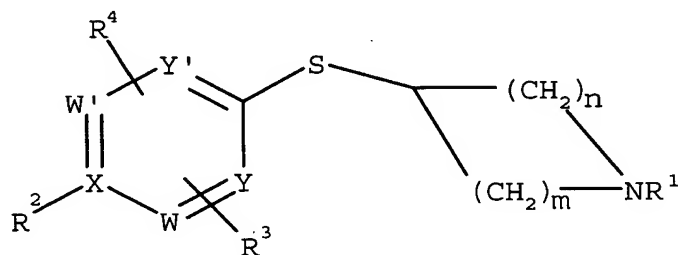


Amendments to the Claims

1. (original) A method of treatment of a condition indicating treatment with a beta 4 subtype selective nicotinic acetylcholine receptor modulator comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R^1 is -H,

C_{1-12} alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4} alkoxy or C_{1-4} alkylthio, or aryl- C_{1-4} alkyl;

R^2 is -H,

-OH,

-C(O)-NH₂,

-NH₂,

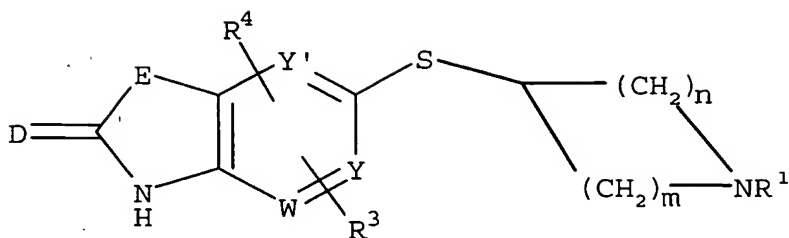
-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO₂-;

V is H, aryl, aryl- C_{1-12} alkyl, diaryl- C_{1-12} alkyl, lactonyl, or C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, -C(O)OC₁₋₄alkyl, -OC(O)C₁₋₄alkyl, aryl- C_{1-4} alkoxy, aryloxy, or SO₂C₁₋₄alkyl; and

T is H, halogen, C_{1-5} alkyl, C_{1-4} alkoxy, nitro, aryl, aryl- C_{1-4} alkyl, or aryloxy unless V is H in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein D is O or S; and
 E is O, S, NR^5 , $\text{C}(\text{R}^5)_2$, $\text{O}-\text{CR}^5_2$, $\text{NR}^5-\text{CR}^5_2$,
 NR^5-CO , CR^5_2-O , $\text{CR}^5_2-\text{S}(\text{O})_r$, $\text{CR}^5_2-\text{NR}^5$, CR^5_2-
 CR^5_2 , $\text{CO}-\text{NR}^5$, or $\text{CR}^5=\text{CR}^5$;

unless X is N in which case R^2 is absent

R^3 is H, halogen, C_{1-4} alkyl optionally substituted with from 1 to 3 fluorine atoms,
 cyano, CF_3 , OC_{1-4} alkyl, aryloxy, aryl C_{1-4} alkyl, aryl C_{1-4} alkoxy, C_3-
 $_{10}$ cycloalkoxy, carboxy, carbonamido, $-\text{CO}-$, $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $\text{NH}-\text{C}_{1-4}$ alkyl, aryl,
 hydroxy, $-\text{SO}_2\text{NH}_2$, $-\text{SO}_2\text{NHC}_{1-4}$ alkyl, or $-\text{C}_{1-4}$ alkyl-OH;
 R^4 is H, halogen, C_{1-4} alkyl optionally substituted with from 1 to 3 fluorine atoms,
 cyano, CF_3 , OC_{1-4} alkyl, aryloxy, aryl C_{1-4} alkyl, aryl C_{1-4} alkoxy, C_3-
 $_{10}$ cycloalkoxy, carboxy, carbonamido, $-\text{CO}-$, $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $\text{NH}-\text{C}_{1-4}$ alkyl, aryl,
 hydroxy, $-\text{SO}_2\text{NH}_2$, $-\text{SO}_2\text{NHC}_{1-4}$ alkyl, or $-\text{C}_{1-4}$ alkyl-OH;

R^5 is each independently H or C_{1-4} alkyl;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C, R^3 and R^4 are H and R^1 is selected from H,

unsubstituted C₁₋₄alkyl and unsubstituted C₃₋₄cycloalkyl, R² may not be -OH;

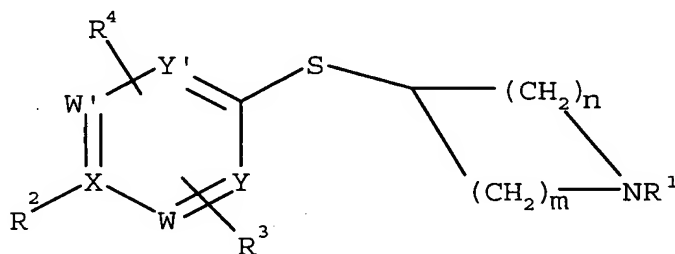
when one of X, Y and Y' is N, R³ and R⁴ are H and R¹ is selected from H, unsubstituted C₁₋₄alkyl and unsubstituted C₃₋₄cycloalkyl, R² may not be H.

2. (original) The method of claim 1 provided that

when X, W, W', Y and Y' are all C and R³ and R⁴ are H, R² may not be -OH; and that

when one of X, Y and Y' is N and R³ and R⁴ are H, R² may not be H.

3. (original) A method of treatment of dysfunctions of the central and autonomic nervous systems comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R¹ is -H,

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio, or aryl-C₁₋₄alkyl;

R² is -H,

-OH,

-C(O)-NH₂,

-NH₂,

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO₂-;

V is H, aryl, aryl-C₁₋₁₂alkyl, diaryl-C₁₋₁₂alkyl,

lactonyl, or C₁₋₁₈alkyl optionally substituted

with halogen, hydroxyl, C₁₋₄alkoxy, -C(O)OC₁₋

$\text{C}_{1-4}\text{alkyl}$, $-\text{OC}(\text{O})\text{C}_{1-4}\text{alkyl}$, $\text{aryl-C}_{1-4}\text{alkoxy}$,

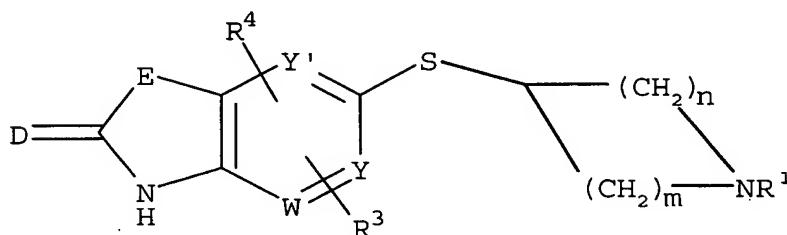
aryloxy, or $\text{SO}_2\text{C}_{1-4}\text{alkyl}$; and

T is H, halogen, $\text{C}_{1-5}\text{alkyl}$, $\text{C}_{1-4}\text{alkoxy}$, nitro,

aryl, $\text{aryl-C}_{1-4}\text{alkyl}$, or aryloxy unless V is H in

which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



(Ia)

wherein

D is O or S; and

E is O, S, NR^5 , $\text{C}(\text{R}^5)_2$, O-CR^5_2 , $\text{NR}^5\text{-CR}^5_2$,

$\text{NR}^5\text{-CO}$, $\text{CR}^5_2\text{-O}$, $\text{CR}^5_2\text{-S(O)}_r$, $\text{CR}^5_2\text{-NR}^5$, $\text{CR}^5_2\text{-}$

CR^5_2 , CO-NR^5 , or $\text{CR}^5=\text{CR}^5$;

unless X is N in which case R^2 is absent

R^3 is H, halogen, $\text{C}_{1-4}\text{alkyl}$ optionally substituted with from 1 to 3 fluorine atoms,

cyano, CF_3 , $\text{OC}_{1-4}\text{alkyl}$, aryloxy, $\text{arylC}_{1-4}\text{alkyl}$, $\text{arylC}_{1-4}\text{alkoxy}$, $\text{C}_3\text{-}$

$_{10}\text{cycloalkoxy}$, carboxy, carbonamido, $-\text{CO-}$, $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $\text{NH-C}_{1-4}\text{alkyl}$, aryl, hydroxy, $-\text{SO}_2\text{NH}_2$, $-\text{SO}_2\text{NHC}_{1-4}\text{alkyl}$, or $-\text{C}_{1-4}\text{alkyl-OH}$;

R^4 is H, halogen, $\text{C}_{1-4}\text{alkyl}$ optionally substituted with from 1 to 3 fluorine atoms,

cyano, CF_3 , $\text{OC}_{1-4}\text{alkyl}$, aryloxy, $\text{arylC}_{1-4}\text{alkyl}$, $\text{arylC}_{1-4}\text{alkoxy}$, $\text{C}_3\text{-}$

$_{10}\text{cycloalkoxy}$, carboxy, carbonamido, $-\text{CO-}$, $-\text{CO}_2\text{H}$, $-\text{NH}_2$, $\text{NH-C}_{1-4}\text{alkyl}$, aryl, hydroxy, $-\text{SO}_2\text{NH}_2$, $-\text{SO}_2\text{NHC}_{1-4}\text{alkyl}$, or $-\text{C}_{1-4}\text{alkyl-OH}$;

R^5 is each independently H or $\text{C}_{1-4}\text{alkyl}$;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C and R³ and R⁴ are H, R² may not be -OH;

and that

when one of X, Y and Y' is N and R³ and R⁴ are H, R² may not be H;

and that

when R² is H, OH or NH₂ and R³ and R⁴ are H, R¹ may not be aryl-C1-4alkyl.

4. (original) The method of any one of claims 1 to 3 wherein

R¹ is -H, or

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio.

5. (currently amended) The method of any one of claims 1 to [[4]] 3, wherein

R² is -H,

-C(O)-NH₂,

-NH₂,

-NH-Q-V-T as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 1;

unless X is N in which case R² is absent.

6. (currently amended) The method of any one of claims 1 to [[5]] 3, wherein

R² is -C(O)-NH₂,

-NH-Q-V-T as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 1;

unless X is N in which case R² is absent.

7. (currently amended) The method of any one of claims 1 to [[6]] 3, wherein

R² is -C(O)-NH₂,

-NH-Q-V-T, wherein

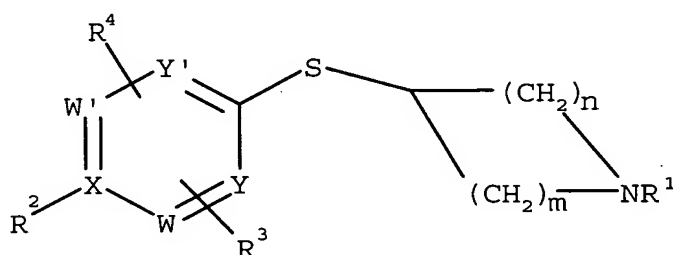
Q is -C(O)-NH-, or -C(O)O-;

V is as defined in claim 1; and

T is as defined in claim 1; or
 linked back to the aromatic ring so as to form a fused bicyclic compound
 represented by Formula (Ia) as defined in claim 1;
 unless X is N in which case R² is absent.

Claims 8 – 12 (canceled)

13. (original) A compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

R¹ is -H,

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio, or aryl-C₁₋₄alkyl;

R² is -H,

-OH,

-C(O)-NH₂,

-NH₂,

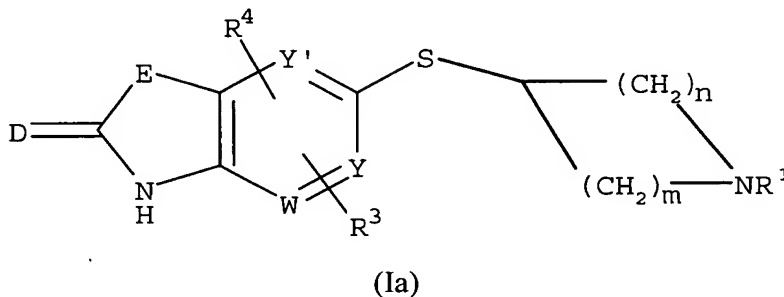
-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO₂-;

V is H, aryl, aryl-C₁₋₁₂alkyl, diaryl-C₁₋₁₂alkyl, lactonyl, or C₁₋₁₈alkyl optionally substituted with halogen, hydroxyl, C₁₋₄alkoxy, -C(O)OC₁₋₄alkyl, -OC(O)C₁₋₄alkyl, aryl-C₁₋₄alkoxy, aryloxy, or SO₂C₁₋₄alkyl; and

T is H, halogen, C₁₋₅alkyl, C₁₋₄alkoxy, nitro, aryl, aryl-C₁₋₄alkyl, or aryloxy unless V is H in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein

D is O or S; and

E is O, S, NR⁵, C(R⁵)₂, O-CR⁵₂, NR⁵-CR⁵₂, NR⁵-CO, CR⁵₂-O, CR⁵₂-S(O)_r, CR⁵₂-NR⁵, CR⁵₂-CR⁵₂, CO-NR⁵, or CR⁵=CR⁵;

unless X is N in which case R² is absent

R³ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-, -CO₂H, -NH₂, NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁴ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-, -CO₂H, -NH₂, NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁵ is each independently H or C₁₋₄alkyl;

X is C or N;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

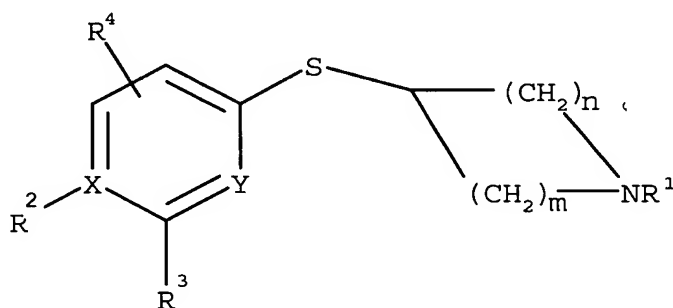
provided that

when X, W, W', Y and Y' are all C and R³ and R⁴ are H, R² may not be -OH;
and that

when one of X, Y and Y' is N and R³ and R⁴ are H, R² may not be H;

and that

when R² is H, OH or NH₂ and R³ and R⁴ are H, R¹ may not be aryl-C1-4alkyl;
and excluding compounds represented by Formula I'' or pharmaceutically acceptable salts thereof:



(I'')

wherein:

R¹, X, Y, m and n are as defined above

R² is -H,

-NH₂,

-NH-Q-V-T, wherein Q is -C(O)- or -SO₂- and

V and T are as defined above;

unless X is N in which case R² is absent

R³ is H, halogen, C₁₋₄alkyl, OC₁₋₄alkyl, -NH₂, NH-C₁₋₄alkyl, or hydroxy;

R⁴ is H, halogen, C₁₋₄alkyl, OC₁₋₄alkyl, CO₂H, -NH₂, NH-C₁₋₄alkyl, or hydroxy.

14. (original) A compound as claimed in claim 13 wherein

R¹ is -H, or

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio.

15. (original) A compound as claimed in claim 13 or claim 14, wherein

R^2 is -H,
 -C(O)-NH₂,
 -NH₂,
 -NH-Q-V-T as defined in claim 13; or
 linked back to the aromatic ring so as to form a fused bicyclic compound
 represented by Formula (Ia) as defined in claim 13;
 unless X is N in which case R^2 is absent.

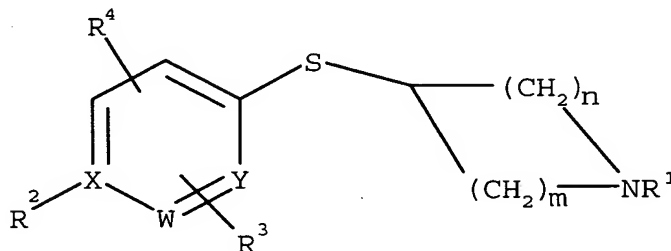
16. (currently amended) A compound as claimed in any one of claims 13 to [[15]] 14,
 wherein

R^2 is -C(O)-NH₂,
 -NH-Q-V-T as defined in claim 13; or
 linked back to the aromatic ring so as to form a fused bicyclic compound
 represented by Formula (Ia) as defined in claim 13;
 unless X is N in which case R^2 is absent.

17. (currently amended) A compound as claimed in any one of claims 13 to [[16]] 14,
 wherein

R^2 is -C(O)-NH₂,
 -NH-Q-V-T, wherein Q is -C(O)-NH-, or -C(O)O-;
 V is as defined in claim 13; and
 T is as defined in claim 13; or
 linked back to the aromatic ring so as to form a fused bicyclic compound
 represented by Formula (Ia) as defined in claim 13;
 unless X is N in which case R^2 is absent.

18. (original) A compound as claimed in claim 13 which is represented by Formula (II) or
 pharmaceutically acceptable salts thereof:



(II)

wherein:

R¹ is -H; or

C₁₋₁₂ alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄ alkoxy or C₁₋₄ alkylthio; or aryl-C₁₋₄ alkyl;

R² is -H;

-OH;

-C(O)-NH₂

-NH₂;

-NH-Q-V-T

Q is -C(O)-;

-C(O)-NH-;

-C(O)O-; or

-SO₂-

V is aryl;

aryl-C₁₋₁₂ alkyl;

diaryl-C₁₋₁₂ alkyl;

lactonyl; or

C₁₋₁₈ alkyl optionally substituted with halogen, hydroxyl, C₁₋₄ alkoxy, -C(O)OC₁₋₄ alkyl, -OC(O)C₁₋₄ alkyl, aryl-C₁₋₄ alkoxy, aryloxy, SO₂C₁₋₄ alkyl;

T is H;

halogen;

aryl;

aryl-C₁₋₄ alkyl; or

aryloxy;

unless X is N in which case R² is absent

R³ and R⁴ are each independently selected from H, halogen, C₁₋₄ alkyl, cyano, CF₃, OC₁₋₄ alkyl, aryloxy, arylC₁₋₄alkoxy, C₃₋₁₀ cycloalkoxy, carboxy, carbonamido, -CO-, -CO₂H, -NH₂, NH-C₁₋₄ alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄ alkyl, -C₁₋₄ alkyl-OH;

X is C or N;

W is C or N, provided that both X and Y are not N;

Y is C or N

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

19. (original) A compound as claimed in claim 18 wherein R^1 is H; C_{1-6} alkyl optionally substituted with 1 or 2 hydroxyl groups; or aryl- C_{1-4} alkyl.

20. (original) A compound as claimed in claim 19 wherein R^1 is benzyl, p-methoxybenzyl, furanylmethyl, imidazolymethyl, pyridinylmethyl, thienylmethyl, pyridylmethyl, N-hydroxypyridylmethyl or thiazolymethyl.

21. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is H, R^3 is carbonamido ($-\text{CONH}_2$) or C_{1-4} alkyl-OH, and R^4 is H, C_{1-4} alkyl, CF_3 , halogen or cyano.

22. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is OH, and R^3 and R^4 each independently represent H, C_{1-4} alkyl, CF_3 , cyano or halogen.

23. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-\text{NH-Q-V-T}$; T is H and R^3 and R^4 each independently represent H, methyl, CF_3 , chloro- or cyano-.

24. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-\text{NH-SO}_2\text{-V-T}$; V is aryl, $-\text{C}_{1-12}$ alkyl or aryl- C_{1-12} alkyl; R^3 is H, methyl, CF_3 , Cl or cyano and R^4 is H.

25. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-\text{NH-SO}_2\text{-V-T}$, V is selected from C_{1-12} alkyl, phenyl, naphthyl, thienyl, oxazolyl, isoxazolyl, or phenyl(CH=CH)-, optionally substituted with 1, 2, 3 or 4 substituents selected from:

$-\text{NO}_2$;

halogen;

$-\text{CF}_3$;

C₁₋₁₂ alkoxy;
C₁₋₁₂ alkylthio;
C₁₋₁₂ alkyl;
C₁₋₄ alkylsulfonyl;
-CN;
-OCF₃;
-C(O)OC₁₋₄ alkyl;
-OCH₂CF₃;
-NHC(O) C₁₋₄ alkyl.

26. (original) A compound as claimed in any one of claims 18 to 20 wherein R² is of formula -NH-SO₂-V-T, T is selected from H; or diazole, oxazole, isoxazole, phenyl or phenoxy, optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO₂;
halogen;
-CF₃;
C₁₋₁₂ alkoxy;
C₁₋₁₂ alkylthio;
C₁₋₁₂ alkyl;
C₁₋₄ alkylsulfonyl;
-CN;
-OCF₃;
-C(O)OC₁₋₄ alkyl;
-OCH₂CF₃;
-NHC(O) C₁₋₄ alkyl.

27. (original) A compound as claimed in any one of claims 18 to 20 wherein R² is of formula -NH-SO₂-V-T, V is selected from 3-chloro-4-methylphenyl, 3-chlorophenyl, 3-methoxyphenyl, 4-bromophenyl, 4-methoxyphenyl, 4-methylphenyl, naphthyl, 2,4,6-trimethylphenyl, phenyl(CH=CH)-, 4-chlorophenyl, 2-chlorophenyl, 2,5-dichlorothien-3-yl, 2,5,6-trimethyl-4-methoxyphenyl, 4-methoxyphenyl, 2,3,4-trifluorophenyl, 3-cyanophenyl, 2-methoxycarbonylthien-3-yl or 4-pentylphenyl and T is H.

28. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-SO_2-V-T$, T is 2-chloro-5-nitrophenoxy and V is phenyl.

29. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-C(O)-V-T$ wherein V is selected from

aryl;

aryl- C_{1-12} alkyl;

diaryl- C_{1-12} alkyl;

lactonyl; or

C_{1-18} alkyl optionally substituted with halogen, hydroxyl, C_{1-4} alkoxy, $C(O)OC_{1-4}$ alkyl, $OC(O)C_{1-4}$ alkyl, aryl- C_{1-4} alkoxy, aryloxy.

30. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-C(O)-V-T$, and V is selected from C_{1-12} alkyl, phenyl, phenyl- C_{1-12} alkyl, diphenylmethyl, naphthyl, furanyl, thienyl, diazolyl, pyridinyl, thiazolyl, benzothienyl, fluorenyl, oxazolyl or isoxazolyl, optionally substituted with 1, 2, 3 or 4 substituents independently selected from

$-NO_2$;

halogen;

$-CF_3$;

C_{1-12} alkoxy;

C_{1-12} alkylthio;

C_{1-12} alkyl;

C_{1-4} alkylsulfonyl;

$-CN$;

$-OCF_3$;

$-C(O)O-C_{1-4}$ alkyl;

$-OCH_2CF_3$.

31. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-C(O)-V-T$, T is selected from

H;

halogen; or

diazole, oxazole, isoxazole, phenyl, phenoxy or benzodioxanyl optionally substituted with 1, 2, 3 or 4 substituents selected from

- NO₂;
- halogen;
- CF₃;
- C₁₋₁₂ alkylthio;
- C₁₋₁₂ alkoxy;
- C₁₋₁₂ alkyl;
- C₁₋₄ alkylsulfonyl;
- CN;
- OCF₃;
- C(O)O-C₁₋₄ alkyl.

32. (original) A compound as claimed in any one of Claims 18 to 20 wherein R² is of formula -NH-C(O)N-V-T wherein V is selected from

- C₁₋₁₈ alkyl optionally substituted with halogen, hydroxyl, C₁₋₄ alkoxy, C(O)OC₁₋₄ alkyl, OC(O)C₁₋₄ alkyl, aryl-C₁₋₄ alkoxy, aryloxy;
- aryl; or
- aryl-C₁₋₁₂ alkyl.

33. (original) A compound as claimed in any one of claims 18 to 20 wherein R² is of formula -NH-C(O)NH-V-T; V is selected from phenyl, phenyl-C₁₋₁₂ alkyl or naphthyl optionally substituted with 1, 2, 3 or 4 substituents selected from

- NO₂;
- halogen;
- CF₃;
- C₁₋₁₂ alkylthio;
- C₁₋₁₂ alkoxy;
- C₁₋₁₂ alkyl;
- C₁₋₄ alkylsulfonyl;
- CN;
- OCF₃;
- C(O)O-C₁₋₄ alkyl.

34. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-C(O)O-V-T$, wherein V is selected from

C₁₋₁₈ alkyl optionally substituted with halogen, hydroxyl, C₁₋₄ alkoxy, C(O)OC₁₋₄ alkyl, OC(O)C₁₋₄ alkyl, aryl-C₁₋₄ alkoxy, aryloxy; aryl; or aryl-C₁₋₁₂ alkyl.

35. (original) A compound as claimed in any one of claims 18 to 20 wherein R^2 is of formula $-NH-C(O)O-V-T$, preferably V is selected from phenyl or phenyl-C₁₋₁₂ alkyl optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO₂;
halogen;
-CF₃;
C₁₋₁₂ alkylthio;
C₁₋₁₂ alkoxy;
C₁₋₁₂ alkyl;
C₁₋₄ alkylsulfonyl;
-CN;
-OCF₃;
-C(O)O-C₁₋₄ alkyl; or
-OCH₂CF₃.

36. (original) A compound as claimed in claim 13 wherein R^2 is of formula $-NH-C(O)-V-T$ wherein V is H, C₁₋₆alkyl, C₃₋₆cycloalkyl, aryl or aryl-C₁₋₁₂alkyl; and T is H, halogen, C₁₋₅alkyl, C₁₋₄alkoxy, nitro, aryl, aryl-C₁₋₄alkyl, or aryloxy unless V is H in which case T is absent.

37. (original) A compound as claimed in claim 36 wherein V is H, C₁₋₆alkyl or C₃₋₆cycloalkyl, and T is H unless V is H in which case T is absent.

38. (original) A compound as claimed in claim 36 wherein V is aryl or aryl-C₁₋₁₂alkyl, and T is H, halogen, C₁₋₅alkyl, C₁₋₄alkoxy, nitro, aryl, aryl-C₁₋₄alkyl, or aryloxy.

39. (original) A compound as claimed in claim 38

wherein V is phenyl, pyridyl, thienyl, thiazolyl, thiadiazolyl, or phenyl-C₁₋₆alkyl; and

T is H, halogen, C₁₋₅alkyl, C₁₋₄alkoxy, nitro, aryl, aryl-C₁₋₄alkyl, or aryloxy.

40. (original) A compound as claimed in claim 13

wherein

R¹ is -H,

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio, or aryl-C₁₋₄alkyl;

R² is -NH₂, or

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO₂-;

V is H, aryl, aryl-C₁₋₁₂alkyl, diaryl-C₁₋₁₂alkyl, lactonyl, or C₁₋₁₈alkyl optionally substituted with halogen, hydroxyl, C₁₋₄alkoxy, -C(O)OC₁₋₄alkyl, -OC(O)C₁₋₄alkyl, aryl-C₁₋₄alkoxy, aryloxy, or SO₂C₁₋₄alkyl; and

T is H, halogen, aryl, aryl-C₁₋₄alkyl, or aryloxy unless V is H in which case T is absent,

R³ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁴ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

X is C;

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are not more than two N atoms in the aryl ring and provided that at least one of W, W', Y or Y' is N;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

41. (original) A compound as claimed in claim 40

wherein

W is C;

W' is C;

Y' is C; and

Y is N.

42. (original) A compound as claimed in claim 40

wherein

W is N;

W' is C;

Y' is C; and

Y is C.

43. (original) A compound as claimed in any one of claims 40 to 42

wherein

R² is -NH₂.

44. (original) A compound as claimed in any one of claims 40 to 42

wherein

R² is -NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO₂-;

V is H, aryl, aryl-C₁₋₁₂alkyl, diaryl-C₁₋₁₂alkyl, lactonyl, or C₁₋₁₈alkyl optionally substituted with halogen, hydroxyl, C₁₋₄alkoxy, -C(O)OC₁₋₄alkyl, -OC(O)C₁₋₄alkyl, aryl-C₁₋₄alkoxy, aryloxy, or SO₂C₁₋₄alkyl; and

T is H, halogen, aryl, aryl-C₁₋₄alkyl, or aryloxy
unless V is H in which case T is absent.

45. (original) A compound as claimed in claim 44

wherein

Q is -SO₂- or -CO-.

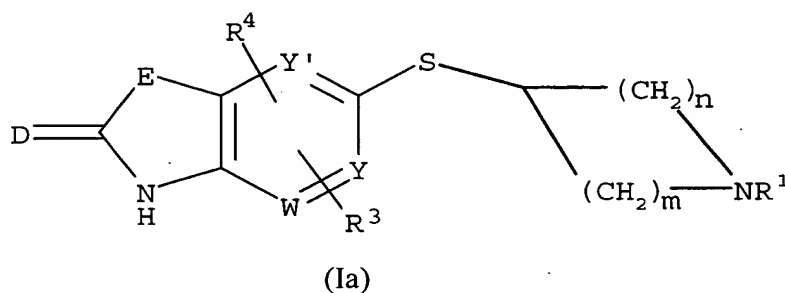
46. (original) A compound as claimed in Claim 13

wherein:

R¹ is -H,

C₁₋₁₂alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C₁₋₄alkoxy or C₁₋₄alkylthio, or aryl-C₁₋₄alkyl;

R² is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein D is O or S; and

E is O, S, NR⁵, or C(R⁵)₂,

R³ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁴ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R^5 is each independently H or C_{1-4} alkyl;

X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring,

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

47. (original) A compound as claimed in Claim 46 wherein E is O or NR^5 .

48. (original) A compound as claimed in Claim 46 or 47 wherein R^5 is/are each independently H or C_{1-4} alkyl.

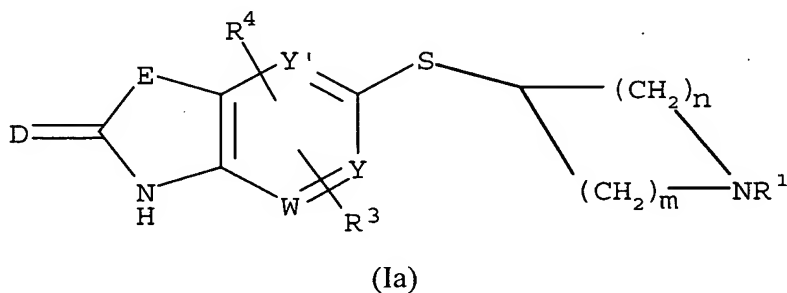
49. (original) A compound as claimed in Claim 13

wherein:

R^1 is -H,

C_{1-12} alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C_{1-4} alkoxy or C_{1-4} alkylthio, or aryl- C_{1-4} alkyl;

R^2 is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein D is O or S; and
E is O-CR⁵₂, NR⁵-CR⁵₂, NR⁵-CO, CR⁵₂-O,
CR⁵₂-S(O)_r, CR⁵₂-NR⁵, CR⁵₂-CR⁵₂, CO-NR⁵, or
CR⁵=CR⁵;

R³ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms,
cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -
SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁴ is H, halogen, C₁₋₄alkyl optionally substituted with from 1 to 3 fluorine atoms,
cyano, CF₃, OC₁₋₄alkyl, aryloxy, arylC₁₋₄alkyl, arylC₁₋₄alkoxy, C₃₋₁₀cycloalkoxy, carboxy, carbonamido, -CO-NH-C₁₋₄alkyl, aryl, hydroxy, -
SO₂NH₂, -SO₂NHC₁₋₄alkyl, or -C₁₋₄alkyl-OH;

R⁵ is each independently H, C₁₋₄alkyl;

X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

50. (original) A compound as claimed in Claim 49 wherein E is O-CR⁵₂, NR⁵-CR⁵₂, NR⁵-CO, CR⁵₂-CR⁵₂, or CR⁵=CR⁵.

51. (original) A compound as claimed in Claim 49 or 50 wherein E is O-CR⁵₂, NR⁵-CO, or CR⁵=CR⁵.

52. (currently amended) A compound as claimed in any one of Claims 49 to [[51]] 50 wherein R⁵ is/are each independently H or C₁₋₄alkyl.

53. (currently amended) A compound as claimed in any one of claims 18 to [[35]] 20 wherein m is 2 and n is 1, 2 or 3.

54. (currently amended) A compound as claimed in any one of claims 18 to ~~[[35]]~~ 20 wherein m is 2 and n is 2.

55. (currently amended) A compound as claimed in any one of claims 18 to ~~[[35]]~~ 20 wherein X, Y and W are C.

56. (canceled)

57. (currently amended) A pharmaceutical composition comprising a compound as claimed in ~~[[any one of]]~~ claim~~[[s]]~~ ~~[[8 to 56]]~~ 13 with a pharmaceutically acceptable diluent or carrier.